

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,468	04/08/2004	John Walter Locher	1075-BI4324	7574
34456	7590 12/04/2006		EXAMINER	
LARSON NEWMAN ABEL POLANSKY & WHITE, LLP 5914 WEST COURTYARD DRIVE SUITE 200			SPEER, TIMOTHY M	
			ART UNIT	PAPER NUMBER
AUSTIN, TX	78730	1775		
			DATE MAILED: 12/04/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comment	10/820,468	LOCHER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Timothy M. Speer	1775				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status	•					
1) Responsive to communication(s) filed on 09 Au	ugust 2006.					
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL. 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowar closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) <u>1-61</u> is/are pending in the application.						
4a) Of the above claim(s) 16-61 is/are withdraw	4a) Of the above claim(s) 16-61 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-15</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers	q.					
9)☐ The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) \square objected to by the	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	• •					
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)-(d) or (f).				
 Certified copies of the priority document 	s have been received.					
2. Certified copies of the priority document		,				
3. Copies of the certified copies of the prior	•	ed in this National Stage				
application from the International Bureau						
* See the attached detailed Office action for a list	of the certified copies not receive	ea.				
Attachment(s)						
1) Motice of References Cited (PTO-892) 2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F 6) Other:	•				

Application/Control Number: 10/820,468 Page 2

Art Unit: 1775

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/09/06 has been entered.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. The scope of these claims is unclear with respect to the variation in thickness. These claims recite a variation in thickness. They do not, however, recite how the variation is measured. Claim 10, which depends from claim 6, defines the variation as the difference between maximum and minimum thickness values along a segment spanning the width of the sheet. So, if claim 10 further limits claim 6, then claim 6, as well as those other claims dependent thereon, include other ways to define the variation in thickness. This is in keeping with the doctrine of claim differentiation. Such other methods, however, are not disclosed in the specification. Accordingly, the scope of these claims cannot be ascertained.

Application/Control Number: 10/820,468 Page 3

Art Unit: 1775

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Locher (Large Diameter Sapphire Window from Single Crystal Sheets).
- 7. Locher teaches a sapphire single crystal having dimensions of 30.5 cm wide X 48 cm long X 0.25 cm thick (page 2, first paragraph). Locher further teaches that the crystals were flat within 0.026 cm (page 5 "Window fabrication and characteristics," first paragraph). Therefore, it is the Examiner's position that the instant claims are anticipated by Locher.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locher.
- 10. Locher was discussed above and fails to teach the claimed thickness of not less than about 0.5 cm. Thickness is a result effective variable. Absent a showing of criticality with respect to the claimed thickness, it would have been obvious to one having ordinary skill in the

Application/Control Number: 10/820,468 Page 4

Art Unit: 1775

art to optimize this parameter through routine experimentation to obtain a window having desired optical properties. It has been held that discovering optimum or workable ranges through routine experimentation involves only routine skill in the art. In re Boesch, 205 USPQ 215 (CCPA 1980). Thus, in the present case, optimization of this parameter is considered to be prima facie obvious in view of Locher.

- 11. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locher.
- 12. Locher was discussed above and fails to teach the claimed shape of the sapphire crystal. Shape is a result effective variable. Absent a showing of criticality with respect to the claimed shape, it would have been obvious to one having ordinary skill in the art to optimize this parameter through routine experimentation to obtain a window having desired optical properties. It has been held that discovering optimum or workable ranges through routine experimentation involves only routine skill in the art. In re Boesch, 205 USPQ 215 (CCPA 1980). Thus, in the present case, optimization of this parameter is considered to be prima facie obvious in view of Locher.

Response to Arguments

13. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Speer whose telephone number is 571-272-8385. The examiner can normally be reached on M-Th, M-F.

Application/Control Number: 10/820,468

Art Unit: 1775

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Timothy M. Speer

JENNIFER MCNEIL
SUPERVISORY PATENT EXAMINER

Page 5